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FACEBOOK, INSTAGRAM OR TIKTOK? – ON THE PERFORMANCE OF ADVERTISING CHANNELS IN DROPSHIPPING

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Abstract

As part of ecommerce, drop shipping as an industry has grown in popularity in recent years. However, marketing in drop shipping has barely been subject to academic research so far. In particular, online advertising channels used in drop shipping represent uncharted scientific territory. Thus, the research "Facebook, Instagram or TikTok? – On the Performance of Advertising Channels in Dropshipping" intends to find out which online advertising channels in drop shipping perform the best. Based on the analysis of survey data, this research shows that Google Ads and email retargeting are the best performing online advertising channels in drop shipping.

Keywords

Drop shipping, ecommerce, online marketing, online advertising channel, cold traffic, warm traffic, retargeting

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1 The Growing Importance of Drop Shipping – an Introduction

The World Wide Web – hardly any other technology has shaped people's lives in the recent past as much as the Internet. Today, it is an integral part of many people's lives and offers its users a wide range of options for doing everyday things quickly and conveniently online. Whether you want to send an email to a colleague on the go or order food to your home, the Internet facilitates a broad range of everyday tasks.

This is also one of the reasons why online shopping is becoming increasingly popular. It offers Internet users the opportunity to order all kinds of products online from the comfort of their own sofa with just a few clicks and have them delivered to their home. Especially in the COVID-19 pandemic, online purchases represent a convenient shopping alternative, as many physical stores and shopping centers have to remain closed for infection control reasons.

In turn, this trend is reflected in the growing popularity of ecommerce. As a special form of ecommerce, drop shipping in particular has benefitted greatly from this trend in the past and will continue to see significant growth in the future. For example, the drop shipping industry had total sales of 102,2 billion USD in 2018 and is forecast to grow at an average annual rate of 28,8% from 2019 to 2025 (Grand View Research 2020).

Despite the projected growth of drop shipping, academic research has barely conducted any studies on this increasingly popular subarea of ecommerce, especially on advertising in drop shipping.

However, since employing the right online advertising channels plays a crucial role for the economic success of a drop shipping business, this study is dedicated to the following research question:

Which online advertising channels achieve the best performance in drop shipping?

In order to find an answer to this research question, an online survey will be employed to collect data that provides information about the performance of the online advertising channels used by the survey participants. Subsequently, descriptive and inferential statistical methods will be used to analyse this data.

To commence this research, chapter 2 first deals with the theoretical foundations of ecommerce and drop shipping in order to provide a basic understanding of the research topic. It also performs a literature review to outline the current state of research and the resulting research gap that this research aims to fill. Chapter 3 then presents the applied methodology, followed by Chapter 4 which presents the results based on this methodology. Chapter 5 then discusses possible reasons for the results presented and explains how this research contributes to the existing literature. Furthermore, action recommendations for practicioners are derived from the results and interesting questions for future research are presented in addition to the limitations of the present research. Finally, chapter 6 summarizes the most important findings.

Note: For reasons of simplification and better readability, the term “advertising channel” is used synonymously for the term “online advertising channel” in this study.

2 Theory

2.1 Drop Shipping – A Theoretical Approach

Simply put, drop shipping is a special form of e-commerce. To get a better understanding of these two concepts, the section below defines them first and subsequently elaborates the specific characteristics of drop shipping by giving an example of two online stores using different approaches.

The term e-commerce “refers to various online commercial activities focusing on commodity

exchanges by electronic means" (Qin et al. 2009, 7). For instance, in a "traditional" online store, a customer orders and pays for a product of their choice. The owner of the online store then ships the goods from their own warehouse to the customer.

Drop shipping, on the other hand, works in a slightly different way: It is an "order fulfilment approach in which online retailers focus on customer acquisition while forwarding orders to wholesalers, who handle the orders and deliver to customers directly at retailers' requests" (Zeng, Gong, and Xu 2019, 1).

Figure 1 illustrates the main difference between these two store concepts. Store A uses a traditional approach by running an online presence and an own warehouse. Store B uses a drop shipping approach by running an online presence while cooperating with an external supplier who is responsible for the storage and shipping of products on behalf of store B.

When a customer orders and pays for their product in *store A,* the warehouse staff receives the customer's shipment information (i. e. delivery address) and ships the product to the customer.

In contrast, when a customer orders and pays for their product in *store B*, the store owner, in turn, forwards the customer's shipment information to the external supplier and orders and pays for the product from the latter. The supplier then fulfills the order by shipping the product directly from his factory to the customer. A profit is generated by setting store B's selling price higher than its supplier's wholesale price.

In this way, the owner of store B does not have physical contact with the products ordered by their customers at any time. He also does not have to bear any financial risk associated with manufacturing products upfront and running an own warehouse without knowing whether all the products will be sold.

2.2 The Role of Online Advertisement in Drop Shipping

So-called “impulse purchases” often play a predominant role for the success of a drop shipping business. They “are a major driver of growth for any dropship store" (Lavrinovich 2020, para. 8). An impulse purchase is defined as “any purchase which a shopper makes but has not planned in advance” (Stern 1962, 59).

Impulse purchases can be triggered by various factors. Designing those factors in a way that persuades potential customers to buy a certain product is crucial for the success of a drop shipping store. For instance, a store’s design can have a major impact on whether customers will buy from that store or not. The product itself can also persuade a potential customer to make a purchase, simply by triggering the customer’s emotions related to owning that product.

Besides those factors, the online advertisements of a drop shipping store also profoundly determine whether it will generate sales through impulse purchases or not. Since impulse purchases constitute a large proportion of a drop shipping store’s revenues, an advertisement needs to attract a customer’s attention immediately and persuade them within a few seconds to buy a product.

Besides creating attention-grabbing and highly persuasive advertisements, drop shipping stores also need to continuously invest operational budget in online advertisements. The reason for that is simple: Unlike well-known brands such as Apple or Coca-Cola, drop shipping stores typically have a small brand awareness (i. e. only few people know these stores). Therefore, these people are usually not aware of a drop shipping store and its products. Hence, in order to attract a potential customer’s attention and generate revenues, drop shipping stores typically first need to target “cold traffic” through online advertisements on social media platforms like Facebook or Instagram. Cold traffic can be defined as people

who have never heard of a store, its brand, products or services before (Deiss and Henneberry 2020). However, drop shipping stores also use retargeting advertisements to generate sales from “warm traffic”. Warm traffic refers to people who intend to buy a certain product. This is because they either already had contact with a store but did not make a purchase (Deiss and Henneberry 2020) or actively search on Google or other searching machines for a certain product.

As a result, a drop shipping store should continuously run advertisements in order to attract new traffic that might purchase one of its products and increase revenues. For this reason, social media platforms as well as searching machines serve as advertising channels and are of particular importance for the success of a drop shipping store. Popular advertising channels include Facebook, Instagram, and Google Ads.

2.3 Literature Review

A closer look at the existing literature on the topic of advertising channels in drop shipping reveals that academic research is still in its infancy. For instance, a great number of the existing studies focusses on the analysis of logistical aspects of drop shipping, such as supply chain analysis (Yu, Cheong, and Sun 2017 or Shi, Sun, and Cheng 2020). However, advertising channels in drop shipping have barely been investigated by academic researchers.

An interesting study by Sharif, Abu Bakar and Ku Akil (2020) in the field of advertising in drop shipping has been conducted recently: It analysed the dynamics of drop shipping advertisements being posted on Instagram to identify those factors that have an impact on whether posts are going viral (i. e. if the post is being shared by an Instagram member more than once).

As explained at the beginning of chapter 2.1, drop shipping is a special form of e-commerce. Due to the limited number of studies on the topic of advertising in drop shipping, the second part of the literature review deals with advertising in e-commerce.

Bayer et al. (2020) show that online advertising in the form of display advertising and paid search advertising can increase the sales and value of a company. More specifically, the study found that paid search advertising increases company sales more than offline advertising. In addition, display advertising increases the value of a company more than offline advertising does.

Another study analyzes online advertising from a different perspective. It concludes that the choice of media type (image or video) of an advertisement displayed on Facebook has an influence on its performance (Tikno 2017). Accordingly, videos advertisements provide a higher user engagement rate than images (Tikno 2017).

A study conducted by Kim, Kwon and Chang (2011), on the other hand, attempts to find out what effects social media advertising has on consumers' online purchase behaviour. It shows that the effects of the advertisements studied are mainly improved "interactivity, information, trust vividness and brand image" (Kim, Kwon, and Chang 2011, 89), ultimately increasing product sales and customer loyalty towards brands.

Another interesting study aims at investigating the effectiveness of influencer marketing compared to social media advertising. The study’s results show that sponsored advertisements elicit more user engagement than influencer advertisements and are saved more often by users than influencer advertisements (Jarrar, Awobamise, and Aderibigbe 2020).

In another interesting study, the authors Suciu, Năsulea, and Năsulea (2019) look at the long-term effectiveness of paid online advertising for small and medium e-commerce enterprises. More precisely, they wonder if investments in online advertising at the beginning of the

business operations are sufficient to build a sustainable business model or if sales automatically decrease again when advertising activity is reduced. In their research, the authors found out that, in the case of small and medium e-commerce enterprises, "a decreased advertising budget positively affects the number of visitors and the stores' sales" (Suciu, Năsulea, and Năsulea 2019, 1190). This can be explained by online advertisements increasing the brand awareness at one point and eventually leading customers to purchase a product at a later stage (Suciu, Năsulea, and Năsulea 2019).

A look at the current state of research shows that advertising in drop shipping has hardly been researched so far. Advertising in e-commerce, on the other hand, has already been the subject of a few studies. For example, it has been investigated which media type (image or video) of a Facebook advertisement achieves better performance (Tikno 2017) or which effects social media advertising has on consumers' online purchase behaviour (Kim, Kwon & Chang 2011). However, in all of these studies, the focus was always placed on the advertisement itself, but never on the platform or advertising channel on which the advertisement was placed.

As a result, there is an interesting research gap to be closed, which is why the present study is dedicated to finding out which are best performing advertising channels in drop shipping.

3 Methodology

3.1 Which Variables to Analyse?

Before going into the methodology in more detail, it is necessary to discuss the term “performance” in the context of advertising channels in drop shipping.

As already explained in the introduction, this research examines the question of which advertising channels achieve the best performance in drop shipping.

But what is meant by the “performance” of an advertising channel? How should the term be defined in the context of this research work in order to allow for a meaningful answer to the research question?

To answer this question, it makes sense to take a step back and look at what defines the performance of an advertisement.

The variety of key performance indicators (KPIs) for measuring the success of online advertisements can be overwhelming: From the click-through rate (i. e. the number of users who click on an advertisement divided by the number of users who have seen the advertisement) to the cost-per-click (i. e. the cost that an advertiser pays for the click of a user) to the engagement rate (number of users who have interacted with the advertisement divided by the number of users who have seen the advertisement but have not reacted to it), there are various key figures that can be used to assess the performance of an online advertisement. However, since online stores usually intend to maximize their profits, one metric seems to be particularly well suited for assessing the research question: the so-called “ROAS”.

The ROAS is a special form of the return on investment (ROI) and stands for "Return on Advertising Spend". It measures the profitability of an advertisement and represents the ratio of advertising revenue (A) to cost of advertising (C) (Davis 2018):

$$\text{ROAS} = \frac{\text{A}}{\text{C}}$$

The higher the ROAS, the more profitable an advertisement is.

However, the ROAS does not only depend on the advertisement as such, but also on the advertising channel on which the advertisement is displayed. For example, the ROAS of one and the same advertisement on Facebook can be higher than on Pinterest or Google because,

for instance, the target group reached on Facebook has a higher purchase power than those on Pinterest or Google and therefore buys a product more frequently than on the latter two platforms. For this reason, the ROAS can also be used to assess the performance of an advertising channel.

However, the ROAS is only meaningful to a limited extent. Especially in the case of a new advertising campaign with initially low sales figures, it can be subject to relatively high fluctuations. If, for instance, the first product is sold within a new advertising campaign, the revenue is 50€ and the cost of advertising is 10€. This results in a ROAS of 5 and wrongly creates the impression that the advertising channel is particularly well suited for advertising. The reason: If the second sale of the new advertising campaign (again for 50€) takes place only after another 40€ of advertising budget have been spent, the ROAS suddenly falls to 2, because:

$$\frac{50€ + 50€}{10€ + 40€} = 2$$

The higher the revenue, the more the ROAS "consolidates" and the lower the possible fluctuations, so that the ROAS becomes more meaningful. Therefore, in addition to the ROAS, the revenue will also be taken into consideration to investigate the performance of advertising channels in drop shipping.

3.2 Applied Methodology

In order to determine both the ROAS and the revenue for an advertising channel, an online survey was designed and conducted.

The core of the survey was divided into two blocks of questions: As already explained in chapter 2.2, drop shipping stores generate revenues through cold and warm traffic.

In the first block of questions, the participant could therefore choose from a variety of different advertising channels (e. g. Facebook, Instagram or Snapchat) which drop shipping stores usually employ for advertisements designed to attract cold traffic.

The respondent was then asked about the revenue and ROAS they had achieved on each of their chosen advertising channel on average per month over the past 12 months.

For this purpose, the participant was asked in which predefined range his revenue and ROAS fell (e. g. participant's revenue: 18.482,97€ → selected revenue range: 5.000€-20.000€). There was a simple reason for this approach: after sending out "presurveys" for test purposes, the feedback from respondents was mainly that it is very tedious to look up the exact revenue and ROAS values of the selected advertising channels and enter them manually. In order to avoid a high bounce rate of participants, predefined revenue and ROAS ranges were therefore used. Moreover, the feedback also showed that the vast majority of participants were able to recall the figures relatively accurately from memory, as they check their revenue and ROAS figures on a daily basis to keep track of their stores' financial situation. Selecting ranges for the revenue and ROAS therefore proved to be an appropriate measurement scale.

The second block of questions was structured almost identically to the first - with the difference that it did not refer to cold traffic, but warm traffic.

In addition, the participants were asked to relate their revenue figures to the so-called "DACH region". This includes the countries Germany, Austria and Switzerland. There were two reasons for this:

1. Based on the feedback on the presurvey, several participants asked to which geographical area the revenue and ROAS values should be related. Since the majority of the presurvey participants are only active in the DACH region, participants were asked to relate their revenue and ROAS figures to this geographical area. This was to

avoid asking for worldwide revenue and ROAS figures, which would likely have resulted in an unintentional pre-selection of participants who are only active in the DACH region.

2. In order to make the data comparable, it seemed reasonable to limit the revenue and ROAS values to the DACH region, as the demographics of the three countries Germany, Austria and Switzerland (Desson et al. 2020) are very similar and thus the advertising channels give access to similar target groups for advertisements.

3.3 Survey Participants & Data Collection

As explained in chapter 1, the drop shipping industry has seen strong growth in recent years. This has led to the creation of numerous networks and communities of drop shipping store operators helping each other and exchanging information. These groups mainly exist on different internet platforms.

Especially on Facebook, there is a large number of such groups with a high reach, often consisting of several hundred or even thousands of members. These members represented the potential participants for the survey.

The analysis focused on German-speaking Facebook groups. This was also to increase the likelihood that members are active in the DACH region and relate their revenue and ROAS values in the survey to this specific region accordingly (Note: An additional hint at the beginning of the survey remarked that participants were supposed to relate their figures to the DACH region).

The data collection process proved to be quite complex. As already explained in the last section of chapter 3.1, a certain ROAS value in connection with a low revenue is only of

limited validity. Therefore, all Facebook groups were first searched for members who already gained experience and are successful in the drop shipping industry. For this purpose, the "quality" of the member's posts in the groups (e. g. member shows a lot of expertise and experience) was assessed to determine their suitability for participating in the survey. The members identified in this way were then contacted personally and asked to participate in the survey. The rationale behind this approach was simple: Given that the above-mentioned Facebook groups consist of both experienced and unexperienced drop shipping store operators, by filtering out and contacting only experienced store operators, the survey would exclusively gather ROAS values in connection with a high revenue. This would allow for a higher significance of the ROAS values.

3.4 Data Preparation

As the focus of this research work is placed on identifying the best performing advertising channels in drop shipping, it appeared reasonable to calculate the arithmetic mean of the ROAS values of each advertising channel. Subsequently, an analysis of variance (ANOVA) of the mean ROAS values was performed to compare them with each other. This was to ensure that the differences in the mean ROAS values are not of a random nature but can be traced to the different advertising channels.

A total of 81 participants completed the survey. However, before chapter 4 presents the analysis of this data, it is important to note that not all data from these 81 surveys were analysed due to predefined analysis criteria. The rationale behind these criteria is being explained below.

As already explained in chapter 3.1, the ROAS analysis is not useful when revenues are low.

Feedback from the participants of the presurvey showed that the ROAS becomes increasingly stable from an average monthly revenue of around 5.000€ and thus gains in significance. This finding also has an impact on the analysis of the collected data: For example, out of 81 respondents, 79 stated that they used Facebook to acquire cold traffic. However, out of these 79 participants, 10 generated an average monthly revenue of 0-5.000€, so their revenue and ROAS figures were excluded from the analysis. This left 69 respondents.

As already explained in chapter 3.2, the participants were asked to rank the revenue and ROAS of the respective advertising channel. For revenue, these were 0-5.000€, 5.000-20.000€, 20.000-50.000€, 50.000-100.000€, and more than 100.000€, for ROAS, they were 0-2, 2-3, 3-5, 5-7, and more than 7. For instance, if a participant chose 20.000-50.000€ for revenue and 3-5 for ROAS, the mean values of the two intervals were calculated and accordingly a turnover of 35.000€ and a ROAS of 4 were included in the analysis. However, the last two ranks (more than 100.000€ in revenue and more than 7 for the ROAS) and their individual corresponding revenue and ROAS figures were not included in the analysis because no specific mean values could be assigned to them.

This had implications as well: Out of the remaining 69 respondents who use Facebook to acquire cold traffic, four were excluded as they stated that they had an average monthly revenue of 100.000€ or more. Two other respondents who reported a ROAS of more than 7 were also excluded, leaving a total of 63 values for the analysis of Facebook as an advertising channel for cold traffic (see column "Count Total" in table 5 for the remaining values filtered with this method).

This way, both Taboola and TikTok (cold traffic) as well as Pinterest, Snapchat, and Taboola (warm traffic) were excluded from the analysis. Though they initially had a sufficient sample size, they were each left with a sample size too small for an ANOVA to be run after this

filtering process had been applied.

These analysis criteria are ultimately the reason why the figures of column “Count Total” given in tables 5 and 7 (cold traffic) as well 6 and 8 (warm traffic) differ from the number of survey participants (n = 81).

4 Results

The bold, black-coloured numbers in tables 5 and 7 (cold traffic) and 6 and 8 (warm traffic) show the survey data of the advertising channels that remained after applying the analysis criteria described above.

However, before going into these in more detail, an ANOVA of the ROAS values for both the cold traffic as well as warm traffic group will be carried out. This is to ensure that the differences in the ROAS averages to be compared are not due to coincidence, but to the population.

Tables 1 and 2 each show the result of a calculation based on statistical key figures of the collected data, which determines the minimum sample size for carrying out an ANOVA. A minimum sample size of n = 2 results for both the advertising channels used to acquire cold traffic as well as those used to acquire warm traffic. Consequently, only Facebook, Instagram, Google Ads, YouTube, Pinterest, and Snapchat will be analysed below for the "cold traffic" group and Facebook, Instagram, email, Google Ads, and YouTube for the "warm traffic" group.

For both groups, the calculations carried out in the course of the ANOVA (see tables 3 and 4) show that the p value is lower than the significance level of $\alpha = 5\%$. Thus, for the groups "cold traffic" and "warm traffic", the null hypothesis (H_0 = differences between the mean

ROAS values of the advertising channels are not statistically significant) can be rejected. This finding forms the foundation for the comparison of the mean ROAS values of the advertising channels in the following section and their interpretation in chapter 5.1.

A look at table 5 shows: In terms of cold traffic, Pinterest has the lowest average monthly revenue at 29.500,00€, while the revenue on Google Ads is the highest at 53.965,52€. Table 5 also shows that the revenues of Facebook and Instagram, Google Ads and YouTube as well as Pinterest and Snapchat are relatively close to each other. The average revenue of all advertising channels is 39.015,57€. Figure 2 visualises the frequencies of the revenue ranges selected in the survey.

According to table 7, the average monthly ROAS is lowest for Snapchat with 3,5 and highest for Google Ads with 4,78. However, only Facebook and Instagram are close in ROAS, while the rest of the advertising channels show higher differences. The average ROAS of all advertising channels is 4,05. A look at figure 4 shows how often each ROAS range was selected by the survey participants.

The results listed in table 6 show that, in warm traffic, email as an advertising channel has the lowest average monthly revenue at 19.814,81€ while on Google Ads the revenue is again the highest at 31.666,67€. However, the revenues of the advertising channels (except for email) are closer together in comparison to the cold traffic advertising channels overall. The average revenue of all advertising channels in warm traffic is 27.822,98€. Figure 3 shows how often the respective revenue ranges were selected by the survey participants.

The ROAS for warm traffic is as follows: Table 8 shows that YouTube has the lowest average monthly ROAS (4,15) and email the highest (5,35). It also becomes evident that the ROAS of Facebook and Instagram as well as Google Ads and YouTube are relatively close to each other. The average ROAS of all advertising channels is 4,75. Figure 5 depicts the frequencies of the ROAS ranges selected in the survey.

5 Discussion

5.1 Interpretation of the Results

As the presentation of the results in chapter 4 showed, in the "cold traffic" group, Google Ads proved to be the best performing advertising channel with a ROAS of 4,78. In the "warm traffic" group, email presented itself as the best performing advertising channel with a ROAS of 5,35.

But what could be the reason for these results? The following section addresses this question by stating possible reasons of the findings obtained in this study.

In terms of cold traffic, it has become evident that, according to table 7, Google Ads and YouTube have higher mean ROAS values than Facebook and Instagram. One possible reason could be the fierce competition of drop shipping stores fighting for potential customers on Facebook and Instagram. As shown in table 5, significantly more survey participants use Facebook and Instagram than Google Ads to promote their products. This intense competition between different stores pushes up the prices of advertisements, as Facebook and Instagram use an auction model to determine whose ads are displayed in front of a user. In these auctions, each advertiser submits a bid that they are willing to pay to have their advertisement displayed. In order to have a good chance of winning an auction in the face of strong competition, it is often necessary to place a high bid which causes the cost of an advertisement to increase. This is expressed, for example, in an increase in the cost per click (CPC), which indicates how much an advertiser pays on average for a user to click on an advertisement (Davis 2018). The higher the CPC, the higher the cost of advertising, which in turn lowers the ROAS. This might explain as to why Google Ads and YouTube perform better than Facebook and Instagram.

In terms of warm traffic, email has the highest ROAS at 5,35. As already explained in chapter 2.2, warm traffic describes users who show interest in buying a product because they already had contact with a store but did not make a purchase. However, when a customer did not purchase a product, store operators still have the option of retargeting. This is because products are often placed in the shopping cart and the order form is filled out, but the order is then cancelled prematurely for various reasons and no purchase is made. However, the e-mail address already entered in the buyer's address form is saved by the store. This email address is then used to send the prospective buyer an attractive offer by email in order to persuade him to eventually make a purchase. Since only very little costs are incurred in this way (e. g. in the form of fees for server hosting or email retargeting service providers such as Mailchimp), decent revenues can be generated with relatively little expenditure.

Right behind email, Google Ads' mean ROAS value (5,06) again outperforms that of Facebook (4,64) and Instagram (4,53). The same reason (fierce competition) for this observation might apply here as well, given that participants employ Google Ads less often than Facebook and Instagram.

A look at the columns "Average ROAS per Channel" in tables 7 and 8 shows the following picture: The mean ROAS value of advertising channels targeting warm traffic is 4,75. On the other hand, the mean ROAS value of advertising channels targeting cold traffic is 4,05. One reason for this difference could be that warm traffic, which already signalled interest in buying a product, is easier to convince than cold traffic which has not yet had any contact with a product or store. This indicates how important a functioning retargeting campaign can be for the economic success of a drop shipping store.

Due to the low number of values (remaining after applying the analysis criteria) and their associated low significance (see table 7), Snapchat and Pinterest will not be discussed in-depth.

5.2 Contribution to the Existing Literature and Practical Implications

The insights gained in this research study represent a contribution to a still largely unexplored sub-area of ecommerce – advertising in drop shipping. Since very little research has been done in this area so far, the present study can be seen as a cornerstone for further research projects.

However, it not only offers added value for scientific researchers, but also has practical relevance. This is because the findings can be used to derive specific recommendations action for practitioners, as presented in the following section.

As shown by the results presented above, Google Ads performs better than Facebook and Instagram in the area of cold traffic as well as warm traffic – possibly a consequence of the fierce competition on the two social media platforms. Therefore, advertisers of drop shipping stores that have so far focused exclusively on Facebook and Instagram should take a closer look at Google Ads and, if possible, integrate it into their portfolio of advertising channels. This not only allows for a more profitable use of their advertising budget, but also reduces the dependence on advertising channels that are already being employed. The same recommendation for action applies to YouTube as an advertising channel for acquiring cold traffic.

Furthermore, practitioners who have so far attached little or no importance to retargeting should also focus on advertising channels for the acquisition of warm traffic. As the analysis has shown, targeting warm traffic can be an important part of the economic success of a drop shipping store. However, advertisers should not only rely on email, but also consider Google Ads as an optional advertising channel.

5.3 Limitations

As already explained in chapter 3.2, the participants of the survey were asked to refer their information to the DACH region (Germany, Austria and Switzerland). This was to avoid asking for worldwide revenue and ROAS figures, which could have resulted in an unintentional pre-selection of participants who are only selling their products in the DACH region. However, this raises the question of whether and to what extent the insights and recommendations of action also apply to drop shipping stores that are active in the USA or China, for example.

In addition, the participants were asked to use predefined ranges for their revenue and ROAS figures instead of looking up their advertising programmes for the exact values. This was to avoid participants dropping out of the survey due to the significantly higher effort involved in looking up each value. However, this also caused a kind of loss of information, since it is not clear how high the participants' actual revenue and ROAS figures are. Accordingly, the results obtained are likely to deviate from the results that could have been calculated with the help of the exact figures.

Furthermore, it would have been interesting to learn in which product area the survey participants are active. This would have made it possible to assess and interpret the results context-specifically. Instead, the question raises of whether Google Ads is just as profitable for stores with beauty products as for stores with toys. Nevertheless, the question about the product area would have most likely remained unanswered, since the success of a drop shipping store is not only based on its advertising strategy, but also very much on the product it sells. At the end of the day, no store operator wants to reveal the ingredients that constitute their recipe for success.

5.4 Future Research

As already explained in the beginning of chapter 5.2, this study deals with a subarea of ecommerce that is still relatively unexplored. Hence, there is a variety of very interesting questions that scientific researchers could address in the future.

With the help of this study, advertising channels in drop shipping have been analysed on a macro level and recommendations for action have been derived. Now it would be interesting to go to a micro level and examine, for example, which sub-factors have the greatest influence on the performance of the advertising channels analysed in this study: How much does the target group selection for an advertisement influence the performance of the advertising channel? Is an image ad better suited than a video ad to persuade a user of making a purchase? If so, how big is the difference between these two media types? In this way, specific recommendations for action (on a micro level) could be derived after practitioners have made a decision as to which advertising channel to employ. To investigate this question, the use of a multiple regression analysis would be conceivable in order to be able to quantify the effect of the analysed sub-factors.

It would also be interesting to investigate the question of how Apple’s update of its operating system iOS 14 (announced in December 2020) will affect the performance of advertising channels in drop shipping. The announced update is said “reduce the personalisation and targeting advertisers have long relied on to serve ads to select audiences" (Cohen 2020, para. 2). But what does the update ultimately mean in numbers? Will the affected advertising channels really have to accept performance losses? If so, how big will they be?

6 Conclusion

This research addressed the following research question:

> Which online advertising channels achieve the best performance in drop shipping?

After analysing the survey data, this research question can be answered as follows: In terms of cold traffic acquisition, Google Ads achieves the best performance (ROAS = 4,78), whereas email achieves the best performance (ROAS = 5,35) when it comes to acquiring warm traffic.

One reason for the good performance of Google Ads may be found in the relatively strong competition that prevails on Facebook and Instagram. As a result, the cost of an advertisement increases and the ROAS decreases, leaving Google Ads with a relatively higher performance. The performance of email as an advertising channel, on the other hand, may be explained by the costs (incurred for the use of retargeting emails) being relatively low.

In addition, this research also showed that advertising channels aiming at acquiring warm traffic (= retargeting) tend to perform better (ROAS = 4,75) than their equivalents which intend to acquire cold traffic (ROAS = 4,05). This indicates the importance of complementing a portfolio consisting exclusively of advertising channels designed to generate cold traffic with advertising channels geared towards warm traffic.

As a result, this study has not only been able to answer its research question and derive action recommendations for practicioners. It also tapped into largely uncharted scientific territory and highlighted how future research could advance the literature on this relatively unexplored subarea of ecommerce, thereby providing practical added value for operators of drop shipping stores.

However, in face of the dynamic environment that characterises the drop shipping industry, the proposed research questions will most likely not remain the only ones as demand for new research questions is likely to emerge in the not too distant future.

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Figure 1: Comparison Between a Traditional Online Store and a Drop Shipping Store

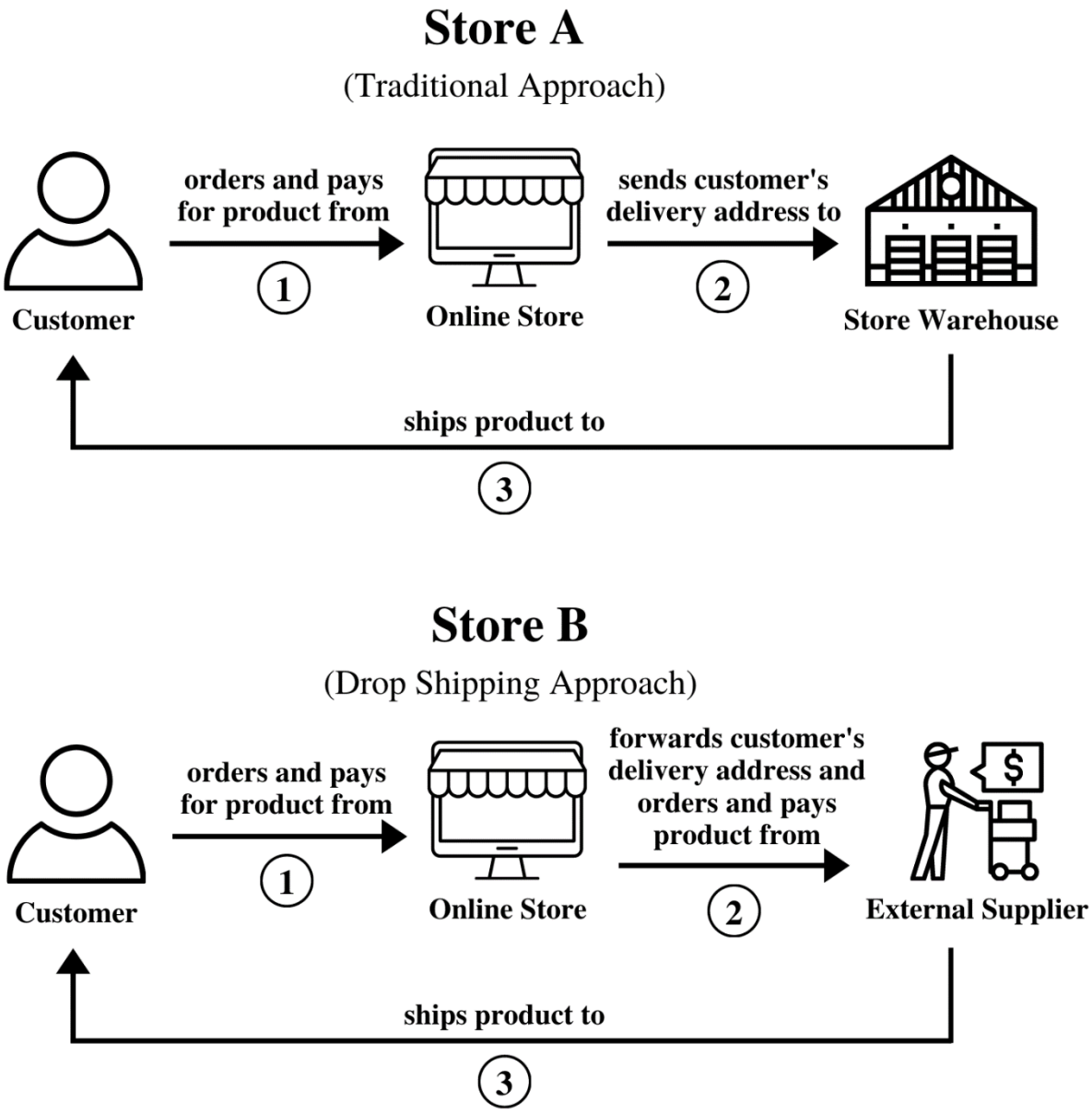


Figure 2: Frequencies of Revenue Figures of Cold Traffic

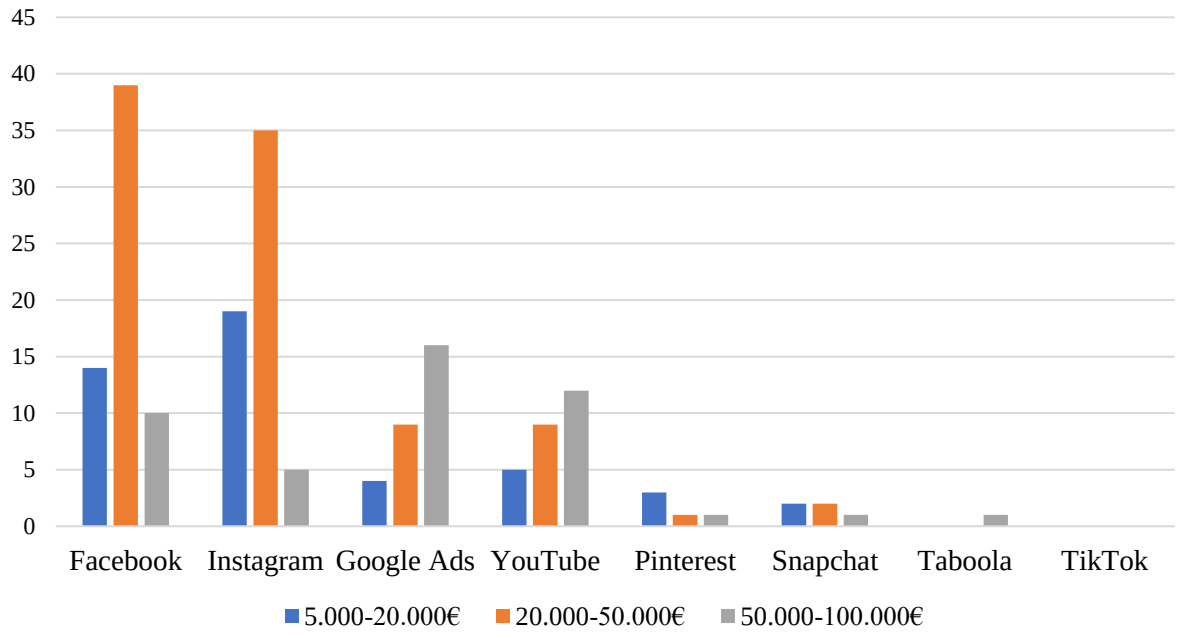


Figure 3: Frequencies of Revenue Figures of Warm Traffic

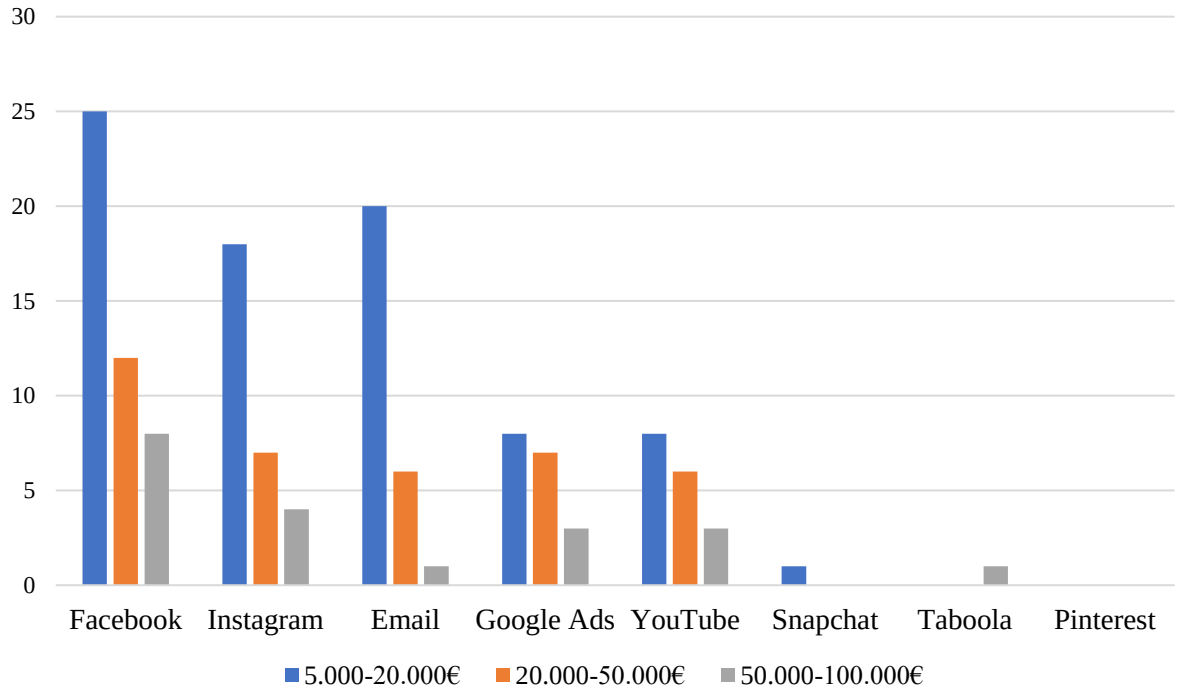


Figure 4: Frequencies of ROAS Figures of Cold Traffic

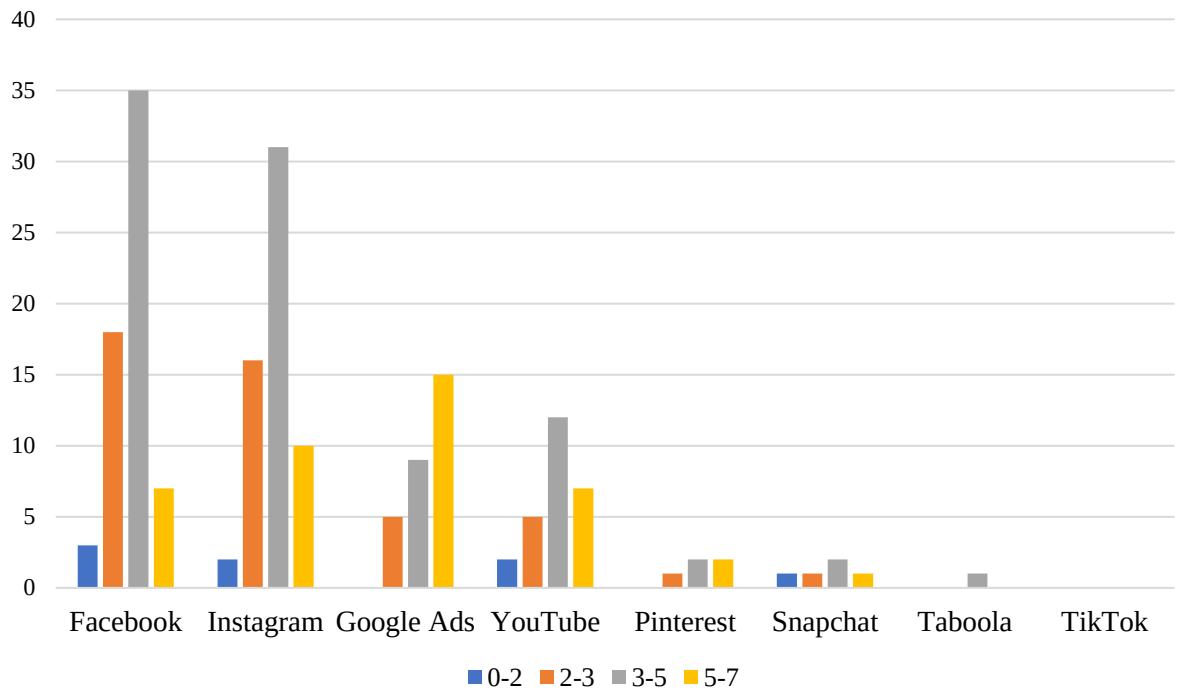
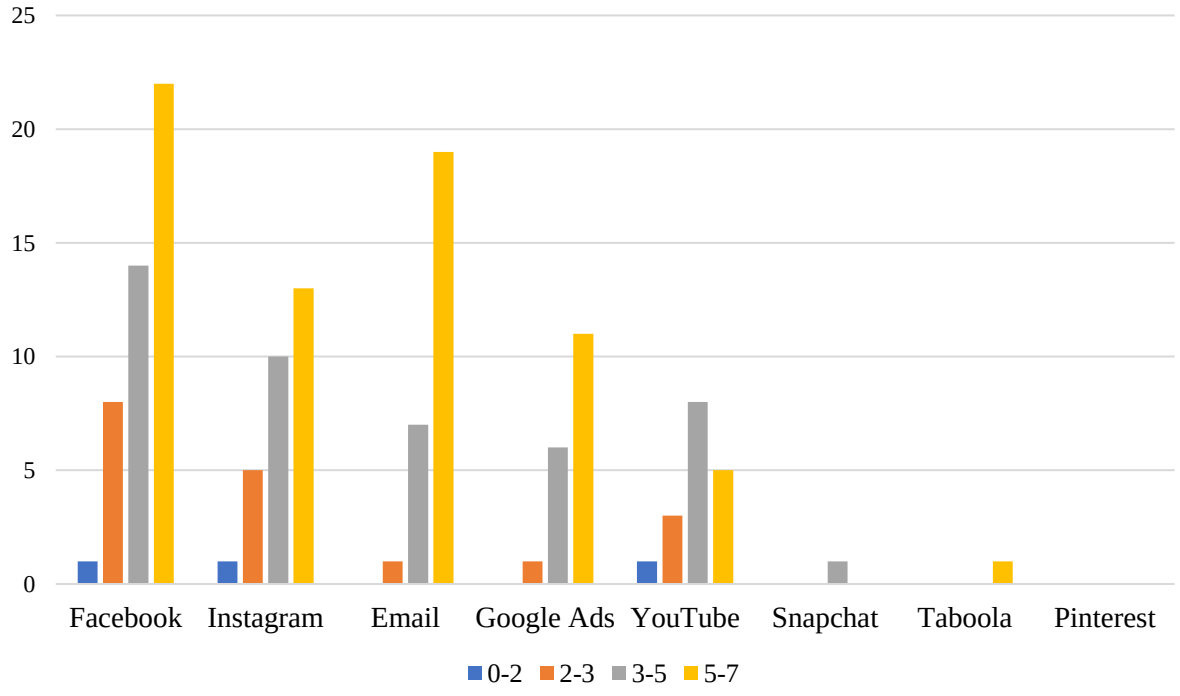


Figure 5: Frequencies of ROAS Figures of Warm Traffic



List of Tables

Table 1: Minimum Sample Size for ANOVA of Mean ROAS Values of Cold Traffic

Minimum Sample Size for Robust Hypothesis Testing		
Sample Data (user inputs):		
Hypothesis Test:		**6 Sample One Way ANOVA**
Alternative Hypothesis :	**Ha**	**Not Equal To**
Confidence Level:	**100*(1-α)%**	**95%**
Skewness:	**Skew**	**0,088264426**
Kurtosis:	**Kurt**	**0,333484875**
Results:		
Minimum sample size for each sample/group:	**n**	**2**

Table 2: Minimum Sample Size for ANOVA of Mean ROAS Values of Warm Traffic

Minimum Sample Size for Robust Hypothesis Testing		
Sample Data (user inputs):		
Hypothesis Test:		**5 Sample One Way ANOVA**
Alternative Hypothesis :	**Ha**	**Not Equal To**
Confidence Level:	**100*(1-α)%**	**95%**
Skewness:	**Skew**	**-0,27546835**
Kurtosis:	**Kurt**	**-0,321560189**
Results:		
Minimum sample size for each sample/group:	**n**	**2**

Table 3: Single Factor ANOVA of Mean ROAS Values of Cold Traffic

SUMMARY

Groups	*Count*	*Sum*	*Average*	*Variance*
Facebook	63	230	3,6507937	1,4164107
Instagram	59	226	3,8305085	1,591467
Google Ads	29	138,5	4,7758621	1,9211823
YouTube	26	104,5	4,0192308	2,2896154
Pinterest	5	22,5	4,5	2,25
Snapchat	5	17,5	3,5	3,5

ANOVA

Source of Variation	*SS*	*df*	*MS*	*F*	*P-value*	*F crit*
Between Groups	28,910812	5	5,7821624	3,3313745	0,0066607	2,2640291
Within Groups	314,15603	181	1,7356687			
Total	343,06684	186				

Table 4: Single Factor ANOVA for Mean ROAS Values of Warm Traffic

SUMMARY

Groups	*Count*	*Sum*	*Average*	*Variance*
E-Mail	27	144,5	5,3518519	1,1118234
Facebook	45	209	4,6444444	2,1888889
Instagram	29	131,5	4,5344828	2,2844828
Google Ads	18	92,5	5,1388889	1,3472222
YouTube	17	70,5	4,1470588	2,2113971

ANOVA

Source of Variation	*SS*	*df*	*MS*	*F*	*P-value*	*F crit*
Between Groups	20,501422	4	5,1253554	2,7131524	0,0327252	2,4408119
Within Groups	247,46917	131	1,8890776			
Total	267,97059	135				

Table 5: Frequencies of Revenue Figures of Cold Traffic

Advertising Channel							Count Total	Average Revenue per Channel	Total Average Revenue
Facebook	Revenue	0-5.000€	5.000-20.000€	20.000-50.000€	50.000-100.000€	More than 100.000€			
	Count	10	14	39	10	4	63	36.349,21 €	
Instagram	Revenue	0-5.000€	5.000-20.000€	20.000-50.000€	50.000-100.000€	More than 100.000€			
	Count	8	19	35	5	4	59	31.144,07 €	
Google Ads	Revenue	0-5.000€	5.000-20.000€	20.000-50.000€	50.000-100.000€	More than 100.000€			
	Count	0	4	9	16	2	29	53.965,52 €	
YouTube	Revenue	0-5.000€	5.000-20.000€	20.000-50.000€	50.000-100.000€	More than 100.000€			
	Count	0	5	9	12	1	26	49.134,62 €	
Pinterest	Revenue	0-5.000€	5.000-20.000€	20.000-50.000€	50.000-100.000€	More than 100.000€			
	Count	2	3	1	1	0	5	29.500,00 €	
Snapchat	Revenue	0-5.000€	5.000-20.000€	20.000-50.000€	50.000-100.000€	More than 100.000€			
	Count	1	2	2	1	0	5	34.000,00 €	39.015,57 €
Taboola	Revenue	0-5.000€	5.000-20.000€	20.000-50.000€	50.000-100.000€	More than 100.000€			
	Count	0	0	0	1	0	1	75.000,00 €	
TikTok	Revenue	0-5.000€	5.000-20.000€	20.000-50.000€	50.000-100.000€	More than 100.000€			
	Count	3	0	0	0	0	0	N/A	

Table 6: Frequencies of Revenue Figures of Warm Traffic

Advertising Channel							Count Total	Average Revenue per Channel	Total Average Revenue
Facebook	Revenue	0-5.000€	5.000-20.000€	20.000-50.000€	50.000-100.000€	More than 100.000€			
	Count	6	25	12	8	2	45	29.611,11 €	
Instagram	Revenue	0-5.000€	5.000-20.000€	20.000-50.000€	50.000-100.000€	More than 100.000€			
	Count	6	18	7	4	1	29	26.551,72 €	
Email	Revenue	0-5.000€	5.000-20.000€	20.000-50.000€	50.000-100.000€	More than 100.000€			
	Count	7	20	6	1	0	27	19.814,81 €	
Google Ads	Revenue	0-5.000€	5.000-20.000€	20.000-50.000€	50.000-100.000€	More than 100.000€			
	Count	2	8	7	3	1	18	31.666,67 €	
YouTube	Revenue	0-5.000€	5.000-20.000€	20.000-50.000€	50.000-100.000€	More than 100.000€			
	Count	2	8	6	3	0	17	31.470,59 €	27.822,98 €
Snapchat	Revenue	0-5.000€	5.000-20.000€	20.000-50.000€	50.000-100.000€	More than 100.000€			
	Count	1	1	0	0	0	1	12.500,00 €	
Taboola	Revenue	0-5.000€	5.000-20.000€	20.000-50.000€	50.000-100.000€	More than 100.000€			
	Count	0	0	0	1	0	1	75.000,00 €	
Pinterest	Revenue	0-5.000€	5.000-20.000€	20.000-50.000€	50.000-100.000€	More than 100.000€			
	Count	1	0	0	0	0	0	N/A	

Table 7: Frequencies of ROAS Figures of Cold Traffic

Advertising Channel							Count Total	Average ROAS per Channel	Total Average ROAS
Facebook	ROAS	0-2	2-3	3-5	5-7	More than 7			
	Count	**3**	**18**	**35**	**7**	2	**63**	**3,65**	
Instagram	ROAS	0-2	2-3	3-5	5-7	More than 7			
	Count	**2**	**16**	**31**	**10**	4	**59**	**3,83**	
Google Ads	ROAS	0-2	2-3	3-5	5-7	More than 7			
	Count	**0**	**5**	**9**	**15**	2	**29**	**4,78**	
YouTube	ROAS	0-2	2-3	3-5	5-7	More than 7			
	Count	**2**	**5**	**12**	**7**	1	**26**	**4,02**	
Pinterest	ROAS	0-2	2-3	3-5	5-7	More than 7			
	Count	**0**	**1**	**2**	**2**	2	**5**	**4,5**	
Snapchat	ROAS	0-2	2-3	3-5	5-7	More than 7			
	Count	**1**	**1**	**2**	**1**	2	**5**	**3,5**	**4,05**
Taboola	ROAS	0-2	2-3	3-5	5-7	More than 7			
	Count	**0**	**0**	**1**	**0**	0	**1**	**4**	
TikTok	ROAS	0-2	2-3	3-5	5-7	More than 7			
	Count	**0**	**0**	**0**	**0**	1	**0**	**N/A**	

Table 8: Frequencies of ROAS Figures of Warm Traffic

Advertising Channel							Count Total	Average ROAS per Channel	Total Average ROAS
Facebook	ROAS	0-2	2-3	3-5	5-7	More than 7			
	Count	**1**	**8**	**14**	**22**	6	**45**	**4,64**	
Instagram	ROAS	0-2	2-3	3-5	5-7	More than 7			
	Count	**1**	**5**	**10**	**13**	2	**29**	**4,53**	
Email	ROAS	0-2	2-3	3-5	5-7	More than 7			
	Count	**0**	**1**	**7**	**19**	6	**27**	**5,35**	
Google Ads	ROAS	0-2	2-3	3-5	5-7	More than 7			
	Count	**0**	**1**	**6**	**11**	8	**18**	**5,06**	
YouTube	ROAS	0-2	2-3	3-5	5-7	More than 7			
	Count	**1**	**3**	**8**	**5**	5	**17**	**4,15**	**4,75**
Snapchat	ROAS	0-2	2-3	3-5	5-7	More than 7			
	Count	**0**	**0**	**1**	**0**	0	**1**	**4**	
Taboola	ROAS	0-2	2-3	3-5	5-7	More than 7			
	Count	**0**	**0**	**0**	**1**	0	**1**	**6**	
Pinterest	ROAS	0-2	2-3	3-5	5-7	More than 7			
	Count	**0**	**0**	**0**	**0**	3	**0**	**N/A**	